

REMARKS

Upon entry of the instant Amendment, claims 1-20 will be pending in the application. By this amendment, claim 6 will have been amended and claims 9-20 will have been added. Support for new claims 9-20 is provided in at least paragraphs [0007] – [0009] of the instant published application 2002/0101985. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

35 U.S.C. § 102 Rejection

Claims 1-8 were rejected under 35 U.S.C. § 102(e) for being allegedly anticipated by U.S. Patent No. 6,870,929 to GREENE.

In order to establish a *prima facie* case of anticipation under 35 U.S.C. § 102, a single prior art reference must disclose each and every element as set forth in the subject claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit that a *prima facie* case of anticipation cannot be established because GREENE fails to teach each and every element of the claims.

More particularly, independent claim 1 recites, *inter alia*,

a first register storing data to be encrypted or decrypted;
a second register for receiving data which has been encrypted or decrypted; and
combinational logic performing computation iterations of the crypto-function on data stored in the first register and outputting data to said second register in a single hardware cycle.

Applicants submit that GREENE does not disclose or even suggest at least these features. Applicants acknowledge that GREENE discloses an arrangement which utilizes an encryption circuit 102, an input buffer 104 and an output buffer 108 (see col. 5, lines 4-12). Applicants also acknowledge that GREENE discloses that the encryption circuit 102 utilizes "data encryption algorithms such as DES and Triple DES, or any of various secure hash algorithms" (see col. 6, lines 58-62). However, Applicants submit that GREENE does not disclose, or even suggest, combinational logic performing computation iterations of the crypto-function on data stored in the first register and outputting data to said second register in a single hardware cycle. Nor has the Examiner identified any language in GREENE which discloses or suggests this feature.

Furthermore, while the Examiner has interpreted a single hardware cycle as "an encryption circuit", the Examiner has failed to appreciate the fact that paragraph [0007] of the instant published application defines a single hardware cycle as a cycle that may take several clock cycles and one wherein the crypt-function is implemented in the combinational logic without intermediate registers that require loading and settling time before contents of the intermediate registers can be read. There is simply no such disclosure in GREENE and the Examiner has not demonstrated otherwise.

Thus, Applicants respectfully submit that independent claim 1, and claims 2-8, which depend from claim 1 are allowable.

Accordingly, Applicants respectfully request that the above-noted rejection under 35 U.S.C. § 102(e) should be withdrawn.


New Claims are also Allowable

Applicants submit that the new claims 9-20 are allowable over the applied art of record. Specifically, claims 9-15 depend from claim 1 which is believed to be allowable. Claims 16-20 recite features as discussed above which are not shown in the applied prior art. Additionally, claims 9-20 recite a combination of features which are clearly not disclosed or suggested by the applied art of record. Accordingly, Applicants respectfully request consideration of these claims and further request that the above-noted claims be indicated as being allowable.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Respectfully submitted,
J. L. CALVIGNAC et al.

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', with a large, loopy flourish extending from the end of the signature.

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